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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------|-----------------|----------------------|---------------------|------------------|
| 10/822,262 | 04/12/2004 | Raymond W. Pace | OC1807 | 2677 |
| 34356 | 7590 07/15/2005 | | EXAMINER | |
| ASHKAN NAJAFI, P.A. | | | NEUDER, WILLIAM P | |
| 6817 SOUTHPOINT PARKWAY SUITE 2301 | | | ART UNIT | PAPER NUMBER |
| JACKSONVILLE, FL 32216 | | | 3672 | |

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|---|-----------------------------|--|--|--|--|
| | 10/822,262 | PACE, RAYMOND W. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | William P. Neuder | 3672 | | | | |
| The MAILING DATE of this communication appe Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | _• | | | | | |
| • | ·_ · · · · · · · · · · · · · · · · · · | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 53 O.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-12</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-12</u> is/are rejected. | 6)⊠ Claim(s) <u>1-12</u> is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examine | r. | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the | drawing(s) be held in abeyance. See | e 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the correcting 11) The oath or declaration is objected to by the Ex | · · · · · · · · · · · · · · · · · · · | • • | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents | s have been received | | | | | |
| 2. Certified copies of the priority documents | | on No. | | | | |
| 3. Copies of the certified copies of the prior | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list | of the certified copies not receive | ed. | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) X Notice of References Cited (PTO-892) | 4) 🔲 Interview Summary | (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Da | ate | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4/12/04. | 6) Other: | atent Application (PTO-152) | | | | |
| | | | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al 6,234,261 in view of Singh et al 2003/0192721.

Evans discloses a drill bit (figure 7) for use in earth boring. The bit has a threaded upper section connectable to a power source. A shank section 112 has a top end secured to the threaded section and an outer surface defining a plurality of blades 126 extending downwardly. A lower portion 128,130 extends parallel to the axis and has a plurality of notches for receiving cutter members 32. The lower part of the bit has three cones. The cones extend outwardly to the lower portion of the shank. Cutting buttons 32 are formed from polycrystalline diamond. The cutting members are in the notches formed in the blades and cooperate with the blades to drill a substantially

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uniform hole. Evans is considered he claimed features except for the cutting members 32 being formed from carbide. Singh teaches that it is common in the drilling industry to form the cutting members from either polycrystalline diamond or tungsten carbide. It would have been obvious to form the cutting members 32 of Evans et al from tungsten carbide as taught by Singh et al since Singh teaches that it is common to form cutting members from diamond or carbon depending upon the type of formation being drilled. As to claim 2, the shank section is rectangular. As to claim 3, the cutting members 32 are imbedded in the notches. As to claims 4,8 and 11, cutting members 32 are spaced equidistant from one another. As to claims 5,9 and 12, the shank diameter is substantially equal to the cone diameter. As to claim 7, the cutting members 32 are arranged so that the shank section will maintain a smooth outer surface.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Neuder whose telephone number is 571-272-7032. The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William P Neuder Primary Examiner Art Unit 3672

W.P.N.